

Grand Canyon Wildlands Council & Glen Canyon National Recreation Area

Lees Ferry 10 Acre Riparian Revegetation Project

















Ongoing Lees Ferry Operations

- **Flag Native Seed and Dick Clark replanted 100 Trees**
- **Birds density and diversity exceeds pre treatment levels**
- **Irrigation scheduled to be terminated this year**
- **Proposal to revegetate area upstream of boat Launch at Lees Ferry**
- **Proposal for 6 Acre revegetation Project in Glen Canyon**
- **Downstream of Lees Ferry????**



Prognosis for Future of Lees Ferry Site

Cottonwood and Sandbar willow trees on lower terrace will do well and grow into mature trees

- Cottonwoods and willows on upper terrace will struggle unless some big flows come to inundate site
- Goodings willow across site will struggle unless they get surface flows
- Upper terrace will be dominated by inkweed, four winged saltbush and arrowweed
- Natives should dominate but some tammys will blow in by seed and germinate
- Recommended that the park service should irrigate the site for another year

DEATH TO THE ALIENS!

Tamarisk Eradication in Grand Canyon Tributaries



Grand Canyon Wildlands Council, Inc.

Grand Canyon National Park

Arizona Water Protection Fund Contract No. 99-075WPF

PROJECT DESCRIPTION

- Compliance
- Assessment of tamarisk infestation, demography, bird habitat
- Develop and train staff, accompanied by numerous volunteers
- Run several teams / trip for 4 trips (more trips through GCNP)
- Cutting, pulling, or girdling tamarisk, and immediately spray-applying Garlon
- Monitoring in Year II (2003) and Year III (2004)
- Reporting
- Continue to encourage the NPS to develop a pro-active control program in other tributaries and along the mainstream

CONTEXT OF THE CONTROL PROJECT

- Coupled with pilot stand replacement at Lees Ferry
- Most tributaries in Grand Canyon have low densities (10-100) of mature tamarisk plants
- These densities have accrued over 70 yr
- Tamarisk can be killed by manual application of Garlon
- Eradication of tamarisk from these tributaries is likely to set back the invasion by 10-50 yr
- This should be enough time to develop and implement a tamarisk management plan for the CR corridor

Umpteen Volunteers

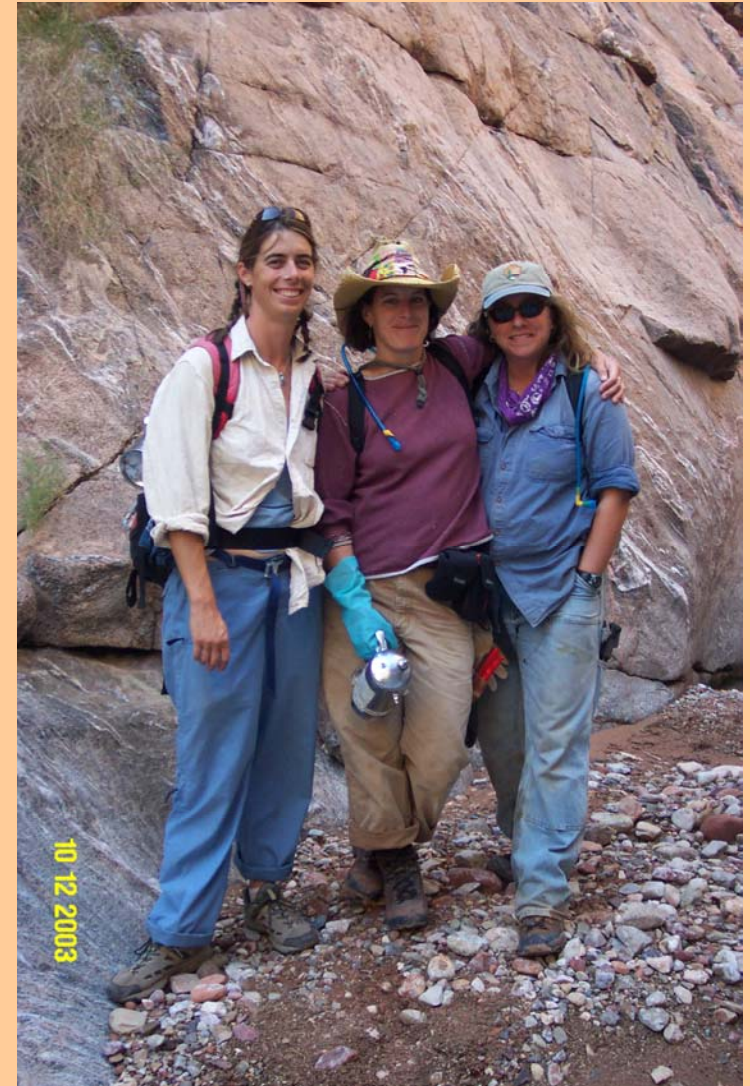


Professional Guides

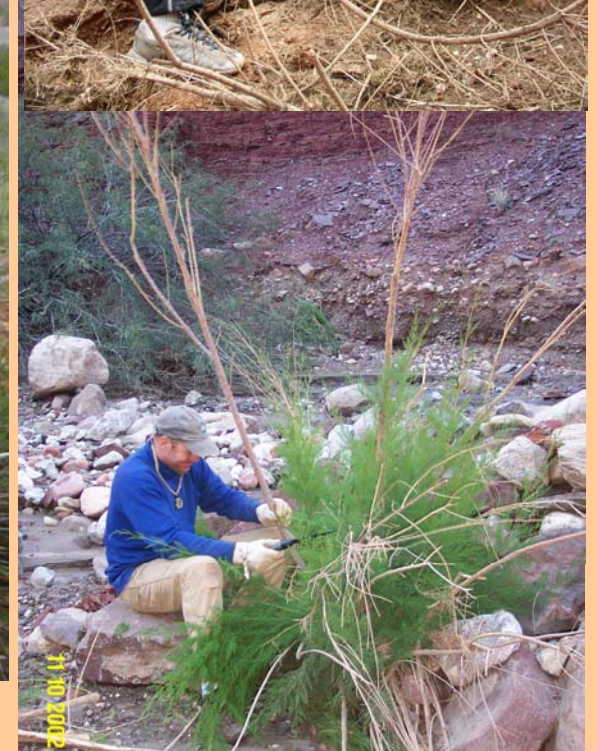
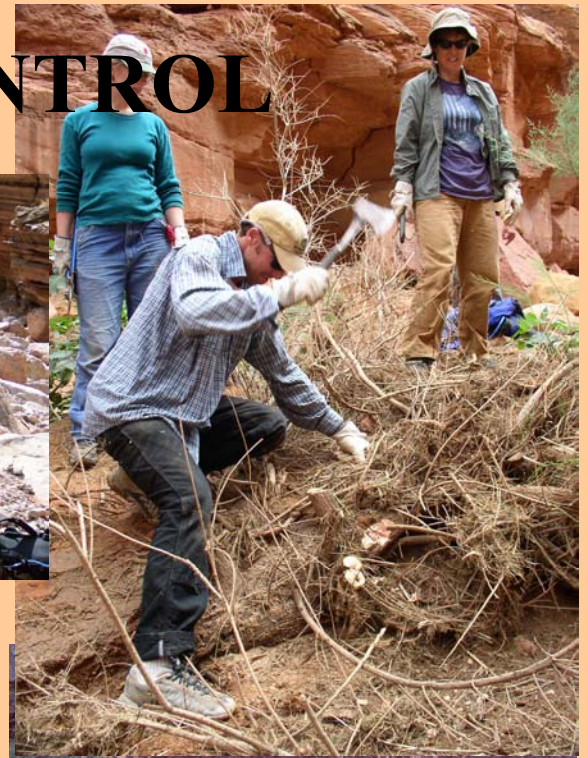


PARTICIPANTS

Crew Leaders



MECHANICAL CONTROL



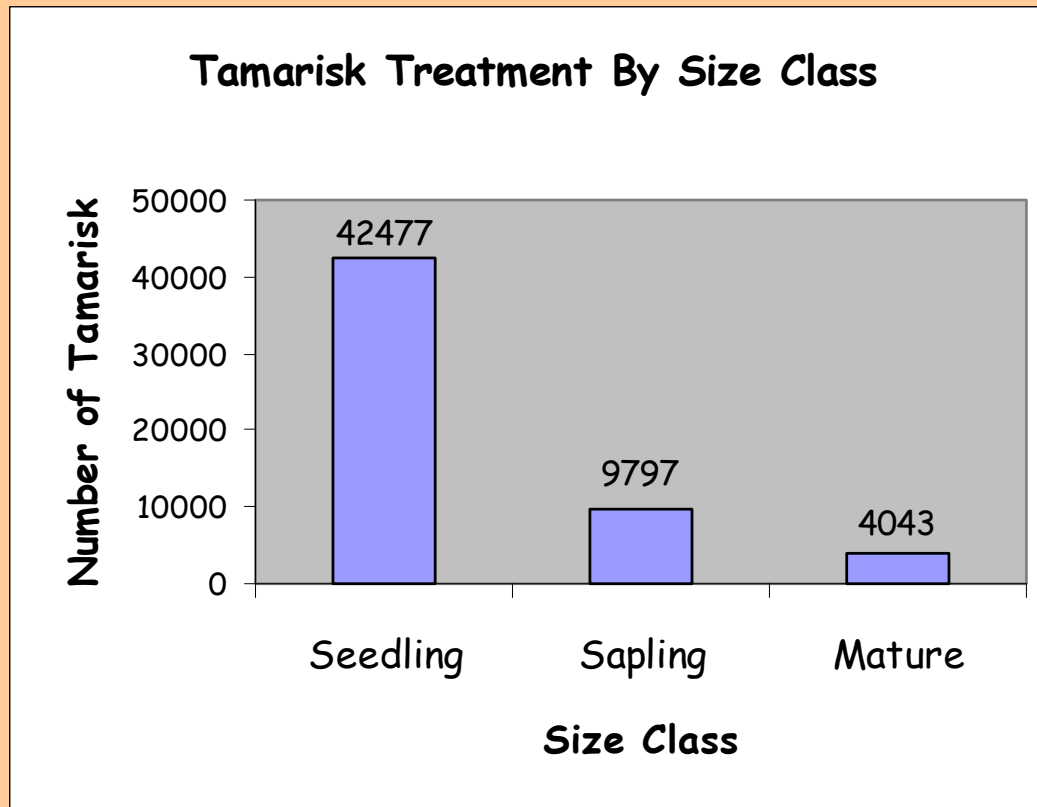
APPLICATION OF GARLON



HAULING BRUSH



Tamarisk control efforts in 2002-2003 resulted in the eradication of 56,317 tamarisk from 65 tributaries in GC



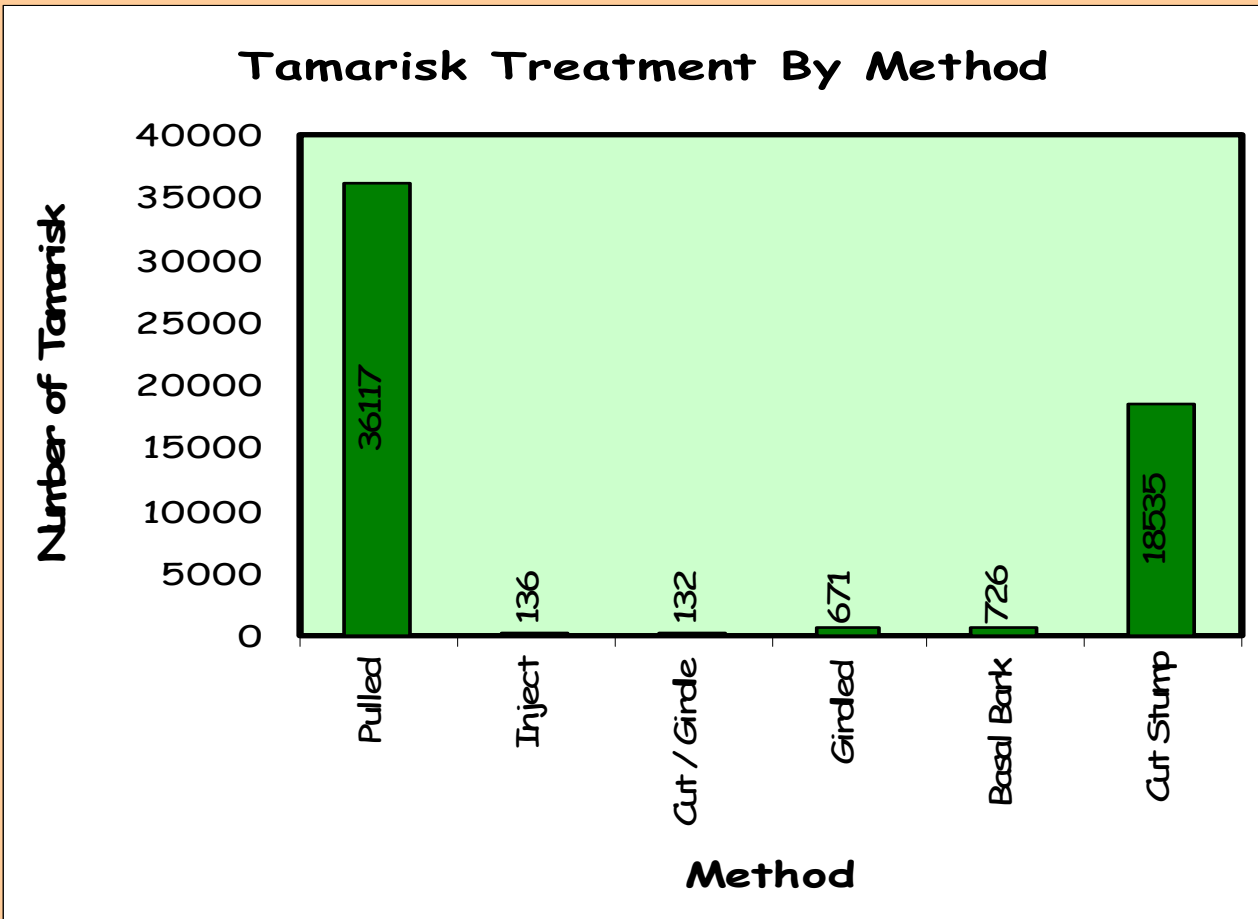
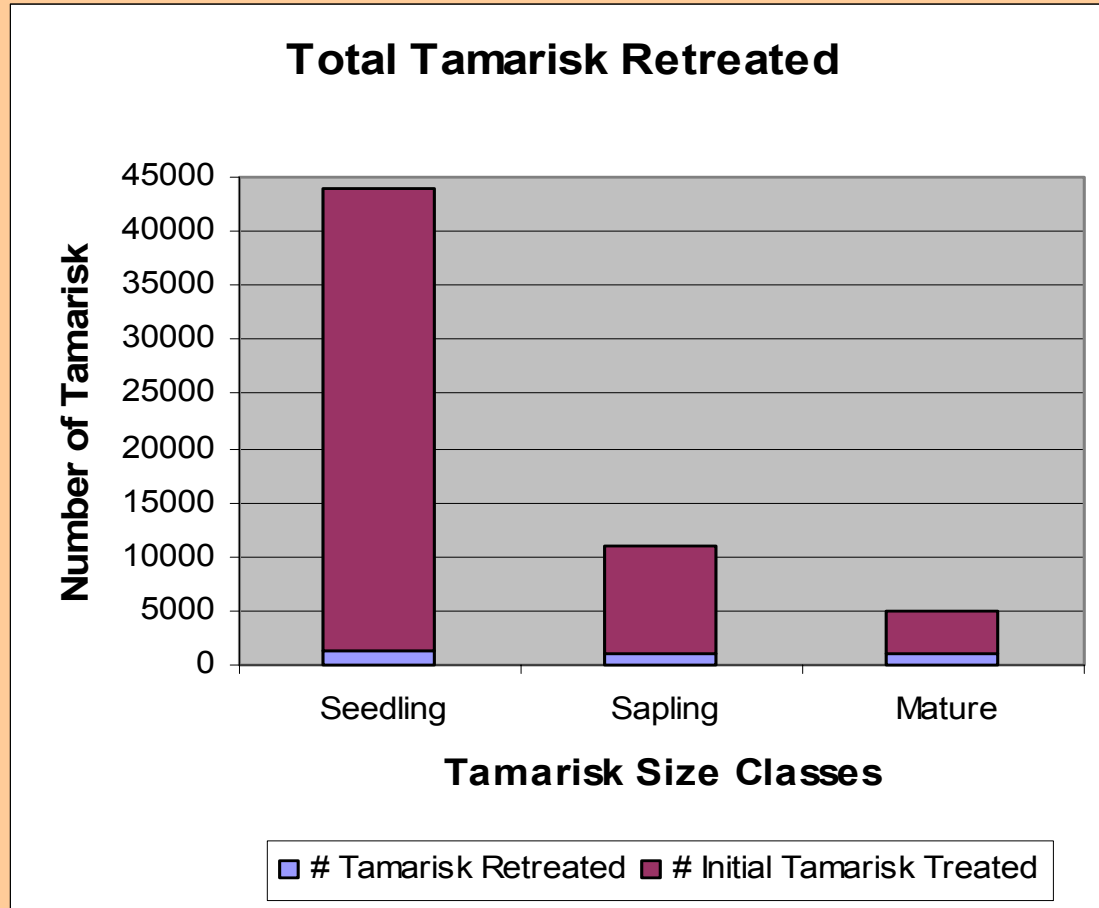


Figure 2. Tamarisk Control by Method

Size Class	# Tamarisk Retreated	# Initial Tamarisk Treated	% Re- treated
Seedling	1376	42477	3.2
Sapling	1168	9797	11.9
Mature	1019	4043	25.2
Total	3563	56317	6.3

Tamarisk Re-treatment to Date –
Percentage by Size Class



Tamarisk Re-treatment to Date
– Numbers by Size Class

CONCLUSIONS

Tamarisk can be controlled or eradicated from tributaries contained within Grand Canyon

Tamarisk cannot be eradicated in mainstream, but could be greatly limited

Resolution of WIFL and other compliance issues

Restore Goodding willow to river corridor